Review of: "Falling Objects and Dust Particles' Motion in the "Collecting Lunar Rock on the Buster Crater" Sequence of the Apollo XVI Footage"

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Potential competing interests: No potential competing interests to declare.

This article was an interesting read. The authors apply a novel approach to archival footage from the Apollo XVI mission to derive the Lunar surface's physical properties, which is an interesting take. I particularly appreciated the videos associated with each described sequence.

However, the paper would greatly benefit from a 'Conclusion' section. This section could provide a comprehensive discussion of the derived parameters and the method used to derive them. It would be particularly interesting to explore the potential applicability of this method to other mission footage, such as the Mars Rover footage.

A few minor comments regarding the Figures:

- Figure D9 – Please rename the x and y axes of the plot, B: Zbag (m) and A: T (s), to help the overall clarity of the work.
- Figure D10 – I would recommend considering the relocation of these tables from the main text to an appendix section. This would improve the paper's overall organization, while the fitting results could be summarized in a few lines or in a smaller table in the main text.
- Figure D18 – Add units on the axis labels: (m) and (s)